ABSTRACT OF THE DISCLOSURE

An automated method and system for determining an optimal focus distance for scanning a molecular array by a molecular array scanner. Blocks of rows of a reference array are automatically scanned at successively greater distances of the stage from a light gathering medium, such as an optical fiber, or z-positions, to produce data providing a functional relationship between z-position and measured signal intensities. The data is then processed by a peak-height-based, or window-based, focus-finding routine that selects an optimal focus-distance for data scans.